Control of Larval Mosquitoes

After hatching from eggs, mosquitoes spend the first part of their lives as larvae (wigglers) inhabiting various types of aquatic habitats. The time that mosquitoes spend in the water as larvae is dependent on the mosquito species and water temperature **(LINK to Reproductive Strategies).** Destroying mosquitoes while still in the larval stages is a very desirable method because the insects can be eliminated before they emerge as biting adults and disperse over large areas. District entomological inspectors search for and inspect areas of standing water such as swales, water detention and retention areas, and other areas that have the potential for mosquito production. If breeding is found, the offending area is treated.

The effectiveness of larval control has been known for nearly a century. Early control efforts consisted of treating breeding areas with Paris Green (arsenic), persistent pesticides such as DDT or Lindane, or motor oil. These methods were quite effective at controlling mosquitoes. However, they had severe environmental consequences, often killing birds, fish and other organisms. Today, these older methods have been eschewed in favor of materials that have minimal consequences for the environment. This mosquito district mainly employs insect growth regulators or bacterial products that are specific only to mosquito larvae which have considerably less deleterious environmental consequences.

Larval control materials come in a variety of iterations. One product comes in a briquette form and can simply be tossed into the offending water. Other products are either liquids, which can be sprayed using a liquid sprayer, or in granular form which can be applied using a hand held blower. The bacterial agent used to treat salt marshes, is impregnated onto ground up corncobs and spread over the breeding parts of wetlands by airplane.